

What is claimed is:

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1. A backlight source device with circular arc diffusion units comprising:
a transparent guide plate with ^{a plurality of} circular arc diffusion units on the front or rear surface thereof, each circular arc diffusion unit having a reflecting surface;
5 a diffusion piece above said guide plate;
a reflecting piece below said guide plate; and
a lateral light source.
 - 10 2. The backlight source device with circular arc diffusion units as claimed in claim 1, wherein the circular arc diffusion units of the transparent guide plate are convex diffusion units.
 3. The backlight source device with circular arc diffusion units as claimed in claim 1, wherein said circular arc diffusion units of the transparent guide plate are concave diffusion units.
 - 15 4. The backlight source device with circular arc diffusion units as claimed in claim 1, wherein said circular arc diffusion units are distributed with unequal spaces.
 5. The backlight source device with circular arc diffusion units as claimed in claim 1, wherein said reflecting surfaces of said circular arc diffusion units have different heights which ^{are} ~~is~~ increased with the distances to said lateral light source.
 - 20 6. The backlight source device with circular arc diffusion units as claimed in claim 1, wherein at least two sets of said circular arc diffusion units are alternatively interlaced on said light guide plate.
 - 25 7. The backlight source device with circular arc diffusion units as claimed in

claim 1, wherein the cross section of said circular arc diffusion units has a V shape.

8. The backlight source device with circular arc diffusion units as claimed in claim 1, wherein the cross section of said circular arc diffusion units has a circular arc shape.

9. The backlight source device with circular arc diffusion units as claimed in claim 1, wherein the projection area of said diffusion units on said guide plate is increased with the distance to said lateral light source.

10. The backlight source device with circular arc diffusion units as claimed in claim 1, wherein the projection area of said diffusion units on said guide plate is increased with the distance to said lateral light source, ^{and} the width of the projection area is between 0.05mm ~ 1mm.

11. The backlight source device with circular arc diffusion units as claimed in claim 1, wherein the thickness of the guide plate is decreased with the distance to said lateral light source for reducing the loss of photo energy.

12. The backlight source device with circular arc diffusion units as claimed in claim 1, wherein said circular arcs of said diffusion units are distributed in ^{an} ~~a~~ inverse direction around the same center.

13. The backlight source device with circular arc diffusion units as claimed in claim 1, wherein said circular arcs of said diffusion units are distributed along a diagonal line.